

IN THE CLAIMS

Please cancel claims 65-92 and 119-130 without prejudice.

Please amend claims 53-54, 59, 61-63, and 114 as follow below.

Please add new claims 131-153 as follow below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

MARKED UP VERSION OF CLAIMS

1 1. (Original) A fiber optic module comprising:
2 one or more electro-optic transducers to convert
3 optical signals into electrical signals or electrical
4 signals into optical signals;
5 a plurality of module contacts to couple electrical
6 signals to the one or more electro-optic transducers or to
7 receive electrical signals from the one or more electro-
8 optic transducers, the plurality of module contacts to
9 couple electrical signals into a host printed circuit board
10 or to receive electrical signals from the host printed
11 circuit board; and
12 an elastomer having spaced apart conductors to couple
13 between host contacts electrically coupled to the host
14 printed circuit board and the plurality of module contacts

15 without shorting to each other, the spaced apart conductors
16 to couple electrical signals between the host printed
17 circuit board and the fiber optic module.

1 2. (Original) The fiber optic module of claim 1
2 wherein,
3 the elastomer having spaced apart conductors is an
4 interposer or z-connector.

1 3. (Original) The fiber optic module of claim 1
2 wherein,
3 the spaced apart conductors of the elastomer are micro-
4 filaments.

1 4. (Original) The fiber optic module of claim 1
2 wherein,
3 the spaced apart conductors of the elastomer are metal
4 columns.

1 5. (Original) The fiber optic module of claim 1
2 further comprising:
3 a compression stop to avoid over-compression of the
4 elastomer.

1 6. (Original) The fiber optic module of claim 1
2 further comprising:

3 a housing to house the one or more electro-optic
4 transducers and the module contacts and provide external
5 access thereto.

1 7. (Original) The fiber optic module of claim 6
2 wherein,
3 the housing is shielded to reduce electro-magnetic
4 interference (EMI) generated by the one or more electro-
5 optic transducers or other electronic devices housed
6 therein.

1 8. (Original) The fiber optic module of claim 6
2 wherein,
3 the housing has a module retention stop to couple to a
4 latch of a module receptacle of the host printed circuit
5 board and hold the fiber optic module engaged within.

1 9. (Original) The fiber optic module of claim 6
2 wherein,
3 the housing has a compression stop to contact a surface
4 to avoid over-compression of the elastomer.

1 10. (Original) The fiber optic module of claim 9
2 wherein,
3 the surface is an inner surface of a back-side of a
4 module receptacle of the host printed circuit board.

1 11. (Original) The fiber optic module of claim 9
2 wherein,
3 the surface is a top surface of the host printed
4 circuit board.

1 12. (Original) The fiber optic module of claim 1
2 further comprising:
3 a means to provide sequential electrical connections
4 during physical insertion of the fiber optic module into a
5 host system.

1 13. (Original) The fiber optic module of claim 12
2 wherein
3 the means to provide sequential electrical connections
4 to further provide sequential electrical disconnections
5 during physical removal of the module from a host system.

1 14. (Original) The fiber optic module of claim 12
2 wherein
3 the means to provide sequential electrical connections
4 is a ground pin and a power pin.

1 15. (Original) The fiber optic module of claim 12
2 wherein
3 the means to provide sequential electrical connections

4 is a ground pad and a power pad.

1 16. (Original) The fiber optic module of claim 15
2 wherein
3 the ground pad and the power pad extend beyond signal
4 pads.

1 17. (Original) The fiber optic module of claim 16
2 wherein
3 the ground pad and the power pad are thicker than the
4 signal pads.

1 18. (Original) The fiber optic module of claim 15
2 wherein
3 the ground pad and the power pad extend beyond signal
4 pads and the ground pad extends beyond the power pad in
5 order to make a ground connection prior to a power
6 connection.

1 19. (Original) The fiber optic module of claim 1
2 wherein,
3 the elastomer is compressible to couple between the
4 host contacts and the module contacts.

1 20. (Original) The fiber optic module of claim 19
2 wherein,

3 the host contacts are mechanically and electrically
4 coupled to the host printed circuit board.

1 21. (Original) The fiber optic module of claim 19
2 wherein,
3 the host contacts are part of an electrical connector,
4 the electrical connector mechanically and electrically
5 coupled to the host printed circuit board.

1 22. (Original) The fiber optic module of claim 19
2 wherein,
3 the spaced apart conductors are compressible.

1 23. (Original) The fiber optic module of claim 6
2 wherein,
3 the housing has a release lever with a catch to couple
4 to a latch of a module receptacle of the host printed
5 circuit board and to retain the fiber optic module therein.

1 24. (Original) A fiber optic module comprising:
2 means for converting optical signals into electrical
3 signals or electrical signals into optical signals;
4 means for coupling electrical signals into and out of
5 the means for converting optical signals into electrical
6 signals; and
7 a compression means having spaced apart conductors to

8 couple between the means for coupling electrical signals
9 into and out of the means for converting optical signals
10 into electrical signals and a means for coupling electrical
11 signals into and out of a host printed circuit board, the
12 plurality of spaced apart conductors spaced apart to avoid
13 shorting to each other.

1 25. (Original) The fiber optic module of claim 24
2 wherein
3 the means for converting optical signals into
4 electrical signals is one or more electro-optic transducers.

1 26. (Original) The fiber optic module of claim 24
2 further comprising:
3 a means for providing sequential electrical connections
4 during physical insertion of the fiber optic module into a
5 host system.

1 27. (Original) The fiber optic module of claim 26
2 wherein
3 the means for providing sequential electrical
4 connections provides for sequential electrical disconnection
5 during physical removal of the fiber optic module from the
6 host system.

1 28. (Original) The fiber optic module of claim 26

2 wherein

3 the means for providing sequential electrical
4 connections is a power pin and a ground pin.

1 29. (Original) The fiber optic module of claim 26

2 wherein

3 the means to provide sequential electrical connections
4 is a ground pad and a power pad.

1 30. (Original) The fiber optic module of claim 24

2 wherein

3 the compression means is an interposer having an
4 anisotropic electrically conductive elastomer filled with
5 conductive particles or micro-filaments.

1 31. (Original) The fiber optic module of claim 24

2 wherein

3 the compression means is an interposer having an
4 anisotropic electrically conductive elastomer filled with
5 conductive columns.

1 32. (Original) The fiber optic module of claim 31

2 wherein

3 the conductive columns are metal columns.

1 33. (Original) The fiber optic module of claim 24

2 wherein,
3 the spaced apart conductors of the compression means
4 are compressible.

1 34. (Original) A fiber optic module comprising:
2 one or more optoelectronic devices to convert
3 electrical signals into optical signals or to convert
4 optical signals into electrical signals or both;
5 a first guide slot to receive a first guide tab of a
6 receptacle and to guide the fiber optic module into the
7 receptacle; and
8 a first stop slot integral with the first guide slot,
9 the first stop slot to receive the first guide tab and to
10 stop further insertion of the fiber optic module into the
11 receptacle.

1 35. (Original) The fiber optic module of claim 34
2 wherein
3 the first guide tab is engaged with the first stop slot
4 by a force of a spring in the receptacle.

1 36. (Original) The fiber optic module of claim 34
2 further comprising:
3 one or more contact pads to electrically couple to the
4 one or more optoelectronic devices,
5 an elastomer including spaced apart conductors, the

6 elastomer to compress and to electrically couple between the
7 one or more contact pads of the fiber optic module and one
8 or more contact pads of a host printed circuit board.

1 37. (Original) The fiber optic module of claim 36
2 wherein
3 the elastomer is compressed and the first guide tab is
4 engaged with the first stop slot by a force of a spring in
5 the receptacle.

1 38. (Original) The fiber optic module of claim 36
2 wherein
3 the spaced apart conductors are conductive columns.

1 39. (Original) The fiber optic module of claim 36
2 wherein
3 the spaced apart conductors are metal columns.

1 40. (Original) The fiber optic module of claim 36
2 wherein
3 the spaced apart conductors are micro-filaments.

1 41. (Original) The fiber optic module of claim 36
2 wherein
3 the spaced apart conductors are conductive particles.

1 42. (Original) The fiber optic module of claim 34
2 further comprising:
3 a compression stop to prevent over-compression of the
4 elastomer.

1 43. (Original) The fiber optic module of claim 34
2 wherein
3 the first guide slot and first stop slot are in first
4 side of the fiber optic module,
5 and the fiber optic module further comprises:
6 a second guide slot to receive a second guide tab of
7 the receptacle and to guide the fiber optic module into the
8 receptacle;
9 a second stop slot integral with the second guide slot,
10 the second stop slot to receive the second guide tab and to
11 stop further insertion of the fiber optic module into the
12 receptacle; and,
13 wherein the second guide slot and the second stop slot
14 are in a second side of the fiber optic module opposite the
15 first side.

1 44. (Original) The fiber optic module of claim 43
2 further comprising:
3 one or more contact pads to electrically couple to the
4 one or more optoelectronic devices,

5 an elastomer including compressible spaced apart
6 conductors, the elastomer to compress and to electrically
7 couple between the one or more contact pads of the fiber
8 optic module and one or more contact pads of a host printed
9 circuit board.

1 45. (Original) The fiber optic module of claim 44
2 further comprising:

3 a compression stop to prevent over-compression of the
4 elastomer.

1 46. (Original) A fiber optic module comprising:
2 one or more optoelectronic devices to convert
3 electrical signals into optical signals or to convert
4 optical signals into electrical signals or both;

5 a housing to house the one or more optoelectronic
6 devices, the housing including a first guide tab and a
7 second guide tab;

8 the first guide tab to engage a first slot of a
9 receptacle and to guide the fiber optic module into the
10 receptacle; and

11 the second guide tab to engage a second slot of the
12 receptacle and to guide the fiber optic module into the
13 receptacle.

1 47. (Original) The fiber optic module of claim 46

2 wherein

3 the first guide tab to further engage a first stop slot
4 in the receptacle by a force of a spring in the receptacle.

1 48. (Original) The fiber optic module of claim 47

2 wherein

3 the first stop slot to stop further insertion of the
4 fiber optic module into the receptacle.

1 49. (Original) The fiber optic module of claim 47

2 further comprising:

3 one or more contact pads to electrically couple to the
4 one or more optoelectronic devices,

5 an elastomer including spaced apart conductors, the
6 elastomer to compress and to electrically couple between the
7 one or more contact pads of the fiber optic module and one
8 or more contact pads of a host printed circuit board.

1 50. (Original) The fiber optic module of claim 49

2 wherein

3 the first stop slot to allow compression of the
4 elastomer and electrical coupling between the one or more
5 contact pads of the fiber optic module and the one or more
6 contact pads of the host printed circuit board.

1 51. (Original) The fiber optic module of claim 49

2 further comprising:

3 a power pin extending beyond the one or more contact
4 pads; and

5 a ground pin extending beyond the power pin and the one
6 or more contact pads,

7 the power pin and ground pin to couple to a power
8 socket and a ground socket to provide sequencing of
9 electrical connections for hot pluggability.

1 52. (Original) The fiber optic module of claim 47
2 further comprising:

3 one or more contact pads to electrically couple to the
4 one or more optoelectronic devices,

5 an elastomer including spaced apart conductors, the
6 elastomer to compress and to electrically couple between the
7 one or more contact pads of the fiber optic module and one
8 or more contact pads of an electrical connector coupled to a
9 host printed circuit board.

1 53. (Currently Amended) The fiber optic module of
2 claim 52 further comprising:

3 a power pin extending beyond the one or more contact
4 pads; and

5 a ground pin extending beyond the power pin and the one
6 or more contact pads,

7 the power pin and the ground pin to respectively couple

8 to a power socket and a ground socket of the electrical
9 connector to provide sequencing of electrical connections
10 for hot pluggability.

1 54. (Currently Amended) A fiber optic module
2 comprising:
3 a housing;
4 one or more opto-electronic devices in the housing to
5 convert between optical signals and electrical signals;
6 a plurality of signal contacts to couple electrical
7 signals to the one or more opto-electronic devices or to
8 receive electrical signals from the one or more opto-
9 electronic devices;
10 an elastomer having spaced apart conductors to couple
11 to the plurality of ~~module~~ signal contacts; and
12 a retention stop coupled to the housing, the retention
13 stop to couple to a latch of a module receptacle to retain
14 the fiber optic module therein.

1 55. (Original) The fiber optic module of claim 54
2 wherein,
3 the elastomer having spaced apart conductors is an
4 interposer.

1 56. (Original) The fiber optic module of claim 54
2 wherein,

3 the spaced apart conductors of the elastomer are micro-
4 filaments.

1 57. (Original) The fiber optic module of claim 54
2 wherein,
3 the spaced apart conductors of the elastomer are metal
4 columns.

1 58. (Original) The fiber optic module of claim 54
2 further comprising:
3 a compression stop to avoid over-compression of the
4 elastomer.

1 59. (Currently Amended) The fiber optic module of
2 claim 54 wherein
3 the housing provides external access to the plurality
4 of ~~module~~ signal contacts.

1 60. (Original) The fiber optic module of claim 54
2 wherein,
3 the housing is shielded to reduce electro-magnetic
4 interference (EMI).

1 61. (Currently Amended) The fiber optic module of
2 claim 54 further comprising:
3 a power contact extending beyond the plurality of

4 signal contacts; and
5 a ground contact extending beyond the power contact and
6 the plurality of signal contacts,
7 wherein the power contact and the ground contact to
8 respectively make a power electrical connection and a ground
9 electrical connection prior to the plurality of signal
10 contacts making a signal electrical connection to provide
11 sequencing of electrical connections for hot pluggability.

1 62. (Currently Amended) The fiber optic module of
2 claim 61, wherein ~~further comprising:~~
3 the power contact and the ground contact are pins and
4 the plurality of signal contacts are a plurality of pads.

1 63. (Currently Amended) The fiber optic module of
2 claim 61, wherein ~~further comprising:~~
3 the power contact and the ground contact are pads and
4 the plurality of signal contacts are a plurality of pads.

1 64. (Original) The fiber optic module of claim 54
2 further comprising:
3 at least one release lever having a catch to engage an
4 opening in at least one latch of the module receptacle.

1 65-92. (Canceled)

1 93. (Original) A method of making electrical
2 connections for a fiber optic module, the method comprising:
3 inserting the fiber optic module having module contacts
4 and an elastomer into a cage;
5 applying a force to the fiber optic module to compress
6 the elastomer and form electrical connections; and
7 stopping the compression of the elastomer.

1 94. (Original) The method of claim 93 wherein
2 the elastomer having spaced apart conductors to couple
3 between the module contacts and host contacts of a host
4 printed circuit board without shorting to each other, the
5 spaced apart conductors to couple electrical signals between
6 the host printed circuit board and the fiber optic module.

1 95. (Original) The method of claim 93 wherein
2 prior to applying the force, the method further
3 comprises,
4 making a ground electrical connection; and
5 making a power electrical connection, the ground and
6 power electrical connection to provide hot pluggability.

1 96. (Original) The method of claim 93 further
2 comprising
3 retaining the fiber optic module in position to

4 maintain compression of the elastomer and the electrical
5 connections.

1 97. (Original) A method of engaging a fiber optic
2 module into a host system, the method comprising:
3 engaging a guide tab of the fiber optic module with a
4 guide rail;

5 sliding the guide tab along the guide rail;
6 engaging the guide tab into a stop of the guide rail;
7 and

8 applying a force to the fiber optic module to maintain
9 the guide tab in the stop.

1 98. (Original) The method of claim 97 further
2 comprising:
3 coupling a catch of a release lever into an opening of
4 a latch.

1 99. (Original) The method of claim 97 further
2 comprising:
3 compressing an elastomer between module contacts of the
4 fiber optic module and host contacts.

1 100. (Original) The method of claim 99 wherein
2 the host contacts are coupled to a host printed circuit
3 board.

1 101. (Original) The method of claim 99 wherein
2 the host contacts are part of an electrical connector
3 coupled to a host printed circuit board.

1 102. (Original) A method of engaging a fiber optic
2 module into a host system, the method comprising:
3 engaging a pair of guide tabs of the fiber optic module
4 with a pair of guide rails;
5 sliding the guide tabs along the guide rails;
6 moving the guide rails and the fiber optic module
7 closer to a plane of a host printed circuit board; and
8 compressing an elastomer between module contacts of the
9 fiber optic module and host contacts of the host printed
10 circuit board.

1 103. (Original) The method of claim 102 wherein
2 the moving of the guide rails is by a lever.

1 104. (Original) The method of claim 102 wherein
2 the moving of the guide rails is by a spring.

1 105. (Original) A system comprising:
2 a fiber optic module to engage a module receptacle, the
3 fiber optic module including
4 an optical connector,

5 one or more optoelectronic devices to convert
6 between optical signals and electrical signals,
7 a housing to cover the one or more
8 optoelectronic devices, and
9 a guide tab coupled to the side of the
10 housing;
11 and
12 the module receptacle including
13 a cage to couple to a host printed circuit
14 board,
15 a guide rail to receive the guide tab of the
16 fiber optic module,
17 and
18 a spring coupled to a top of the cage, the
19 spring to apply a force to a top of the housing of
20 the fiber optic module.

1 106. (Original) The system of claim 105 wherein
2 the fiber optic module further includes
3 one or more module contacts, and
4 an elastomer;
5 the module receptacle further includes
6 an electrical connector having one or more
7 host contacts;
8 and
9 the spring to apply sufficient force to the top of the

10 housing of the fiber optic module to compress the elastomer
11 and form electrical connections between the one or more
12 module contacts and the one or more host contacts.

1 107. (Original) The system of claim 106 wherein
2 the one or more module contacts and the one or more
3 host contacts are pads.

1 108. (Original) The system of claim 106 wherein
2 the fiber optic module further includes
3 a ground contact and a power contact
4 extending beyond the one or more module contacts;
5 and
6 the module receptacle further includes
7 a ground contact and a power contact to make
8 an electrical connection with the ground contact
9 and power contact of the fiber optic module prior
10 to the one or more module contacts making
11 electrical connections with the one or more host
12 contacts.

1 109. (Original) The system of claim 108 wherein
2 the one or more module contacts, the one or more host
3 contacts, the ground contact and the power contact of the
4 module receptacle, and the ground contact and power contact
5 of the fiber optic module are pads.

1 110. (Original) The system of claim 108 wherein
2 the one or more module contacts and the one or more
3 host contacts are pads,
4 the ground contact and the power contact of the module
5 receptacle are sockets, and
6 the ground contact and power contact of the fiber optic
7 module are pins.

1 111. (Original) A system comprising:
2 a fiber optic module including
3 an optical connector,
4 one or more optoelectronic devices to convert
5 between optical signals and electrical signals,
6 a housing to cover the one or more
7 optoelectronic devices, and
8 a retention stop coupled to the housing;
9 an electrical connector to couple to a host printed
10 circuit board;
11 and
12 a retention mechanism to couple to the electrical
13 connector at one end, the retention mechanism having a
14 spring latch at an opposite end to couple to the retention
15 stop of the fiber optic module.

1 112. (Original) The system of claim 111 wherein

2 the fiber optic module further includes
3 one or more module contacts, and
4 an elastomer having space apart conductors,
5 the elastomer being compressible;
6 and the electrical connector further has one or more
7 host contacts to make electrical connections with the one or
8 more module contacts through the elastomer.

1 113. (Original) The system of claim 112 wherein
2 the one or more module contacts and the one or more
3 host contacts are pads.

1 114. (Currently Amended) The system of claim ~~[[11]]~~ 111
2 wherein
3 the fiber optic module further includes
4 a ground contact and a power contact
5 extending beyond the one or more module contacts;
6 and
7 the electrical connector further includes
8 a ground contact and a power contact to make
9 an electrical connection with the ground contact
10 and power contact of the fiber optic module prior
11 to the one or more module contacts making
12 electrical connections with the one or more host
13 contacts.

1 115. (Original) The system of claim 112 wherein
2 the fiber optic module further includes
3 a compression stop to avoid over compression
4 of the elastomer.

1 116. (Original) The system of claim 111 further
2 comprising:
3 one or more guide rails to guide the fiber optic module
4 toward the electrical connector and to engage the retention
5 mechanism.

1 117. (Original) The system of claim 116 wherein
2 the fiber optic module further includes
3 one or more guide tabs to engage the one or
4 more guide rails.

1 118. (Original) The system of claim 111 wherein
2 the fiber optic module further includes
3 one or more release levers, each of the one
4 or more release levers including a catch;
5 and the system further comprises
6 one or more latches, each of the one or more latches
7 having an opening to respectively receive the catch of the
8 one or more release levers.

1 119-130. (Canceled)

1 131. (New) A fiber optic module comprising:

2 a base;

3 one or more optical fiber connectors coupled to the
4 base, the one or more optical fiber connectors to couple to
5 one or more optical fibers;

6 one or more opto-electronic devices coupled to the base
7 in alignment with the one or more optical fiber connectors,
8 the one or more opto-electronic devices to convert between
9 optical signals and electrical signals; and

10 an array of pads coupled to the base, the array of pads
11 to provide a parallel data connection with a host printed
12 circuit board.

1 132. (New) The fiber optic module of claim 131 further
2 comprising:

3 a compressible interposer coupled to the array of pads,
4 the compressible interposer having a plurality of spaced
5 apart conductors to electrically couple to the array of
6 pads.

1 133. (New) The fiber optic module of claim 132, wherein
2 the spaced apart conductors of the compressible
3 interposer are micro-filaments.

1 134. (New) The fiber optic module of claim 132, wherein
2 the spaced apart conductors of the compressible
3 interposer are metal columns.

1 135. (New) The fiber optic module of claim 131, wherein
2 the array of pads provide the parallel data connection
3 with the host printed circuit board through a plurality of
4 spaced apart conductors of an interposer electrically
5 coupled to the array of pads.

1 136. (New) The fiber optic module of claim 131 further
2 comprising:
3 a housing coupled to the base.

1 137. (New) The fiber optic module of claim 136 further
2 comprising:
3 a retention stop coupled to the housing, the retention
4 stop to couple to a latch of a module receptacle to retain
5 the fiber optic module therein.

1 138. (New) The fiber optic module of claim 131 further
2 comprising:
3 a compression stop coupled to the base, the compression
4 stop to avoid over-compression of the compressible
5 interposer.

1 139. (New) The fiber optic module of claim 131 further
2 comprising:
3 a power contact extending beyond a surface of the array
4 of pads; and
5 a ground contact extending beyond a surface of the
6 power contact and the surface of the array of pads,
7 wherein the power contact and the ground contact to
8 make electrical connections prior to the array of pads
9 making electrical connections.

1 140. (New) The fiber optic module of claim 139, wherein
2 the power contact and the ground contact are pins.

1 141. (New) The fiber optic module of claim 139, wherein
2 the power contact and the ground contact are pads.

1 142. (New) The fiber optic module of claim 131 further
2 comprising:
3 at least one release lever having a catch to engage an
4 opening in at least one latch of the module receptacle.

1 143. (New) The fiber optic module of claim 131, wherein
2 the array of pads are electrically coupled to the one
3 or more opto-electronic devices.

1 144. (New) An apparatus comprising:
2 a fiber optic module including
3 a housing,
4 one or more optical fiber connectors
5 extending from a front of the housing, the one or
6 more optical fiber connectors to couple to one or
7 more optical fibers,
8 one or more opto-electronic devices mounted
9 in the housing, the one or more opto-electronic
10 devices to convert between optical signals and
11 electrical signals, and
12 an array of pads extending from the housing,
13 the array of pads to provide a parallel data
14 connection with a host printed circuit board;
15 and
16 a compressible interposer to couple to the fiber optic
17 module, the compressible interposer having a plurality of
18 spaced apart conductors to couple to the array of pads of
19 the fiber optic module.

1 145. (New) The apparatus of claim 144, wherein
2 the fiber optic module further includes
3 a retention stop coupled to the housing, the
4 retention stop to couple to a latch of a module
5 receptacle to retain the fiber optic module

6 therein.

1 146. (New) The apparatus of claim 144, wherein
2 the plurality of spaced apart conductors of the
3 compressible interposer are micro-filaments.

1 147. (New) The apparatus of claim 144, wherein
2 the plurality of the spaced apart conductors of the
3 compressible interposer are metal columns.

1 148. (New) The apparatus of claim 144, wherein
2 the fiber optic module further includes
3 a compression stop coupled to the housing,
4 the compression stop to avoid over-compression of
5 the compressible interposer.

1 149. (New) The apparatus of claim 144, wherein
2 the fiber optic module further includes
3 a power contact extending beyond a surface of
4 the array of pads; and
5 a ground contact extending beyond a surface
6 of the power contact and the surface of the array
7 of pads,
8 wherein the power contact and the ground
9 contact to make electrical connections prior to
10 the array of pads making electrical connections.

1 150. (New) The apparatus of claim 149, wherein
2 the power contact and the ground contact are pins.

1 151. (New) The apparatus of claim 149, wherein
2 the power contact and the ground contact are pads.

1 152. (New) The apparatus of claim 144, wherein
2 the fiber optic module further includes
3 at least one release lever having a catch to
4 engage an opening in at least one latch of the
5 module receptacle.

1 153. (New) The apparatus of claim 144, wherein
2 the array of pads are electrically coupled to the one
3 or more opto-electronic devices.